

## SEQUENCE LISTING

<110> INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE (INRA)  
 GRAPPIN, Philippe  
 OGE, Laurent  
 BOVE, Jérôme

<120> Use of L-isoaspartyl methyl transferase as longevity  
 marker in seeds

<130> MJPbv539/118

<150> FR 0313858  
 <151> 2003-11-26

<160> 17

<170> PatentIn version 3.1

<210> 1  
 <211> 13  
 <212> PRT  
 <213> Artificial sequence

<220>  
 <223> Plant L-isoaspartyl methyltransferase consensus sequence

<220>  
 <221> MISC\_FEATURE  
 <222> (9)..(9)  
 <223> X= E, V or S

<220>  
 <221> MISC\_FEATURE  
 <222> (10)..(10)  
 <223> X= A or E

<220>  
 <221> MISC\_FEATURE  
 <222> (13)..(13)  
 <223> X= R, G or Q

<400> 1  
 Arg Tyr Val Pro Leu Thr Ser Arg Xaa Xaa Gln Leu Xaa  
 1 5 10

<210> 2  
 <211> 16  
 <212> PRT  
 <213> Artificial sequence

<220>  
 <223> Plant L-isoaspartyl methyltransferase consensus sequence

<220>  
 <221> MISC\_FEATURE  
 <222> (2)..(2)  
 <223> X= D or E

<220>  
 <221> MISC\_FEATURE  
 <222> (4)..(4)  
 <223> X= Q or K

<220>  
 <221> MISC\_FEATURE  
 <222> (6)..(6)  
 <223> X= V or I

<220>  
 <221> MISC\_FEATURE  
 <222> (9)..(9)  
 <223> X= N or S

<220>  
 <221> MISC\_FEATURE  
 <222> (10)..(10)  
 <223> X= S, E or A

<220>  
 <221> MISC\_FEATURE  
 <222> (14)..(14)  
 <223> X= IS, VS, VT, TS or a peptide bond

<220>  
 <221> MISC\_FEATURE  
 <222> (15)..(15)  
 <223> X= I or V

<220>  
 <221> MISC\_FEATURE  
 <222> (16)..(16)  
 <223> X= K, Q or R

<400> 2  
 Gln Xaa Leu Xaa Val Xaa Asp Lys Xaa Xaa Asp Gly Ser Xaa Xaa Xaa  
 1 5 10 15

<210> 3  
 <211> 17  
 <212> PRT  
 <213> Arabidopsis thaliana

<400> 3  
 Gln Asp Leu Gln Val Val Asp Lys Asn Ser Asp Gly Ser Val Ser Ile  
 1 5 10 15

Lys

<210> 4  
 <211> 15  
 <212> PRT  
 <213> Arabidopsis thaliana

<400> 4  
 Gln Glu Leu Lys Val Ile Asp Lys Asn Glu Asp Gly Ser Ile Lys  
 1 5 10 15

<210> 5  
<211> 13  
<212> PRT  
<213> Arabidopsis thaliana

<400> 5  
Arg Tyr Val Pro Leu Thr Ser Arg Glu Ala Gln Leu Arg  
1 5 10

<210> 6  
<211> 13  
<212> PRT  
<213> Arabidopsis thaliana

<400> 6  
Arg Tyr Val Pro Leu Thr Ser Arg Val Glu Gln Leu Gly  
1 5 10

<210> 7  
<211> 13  
<212> PRT  
<213> Arabidopsis thaliana

<400> 7  
Arg Tyr Val Pro Leu Thr Ser Arg Ser Ala Gln Leu Gln  
1 5 10

<210> 8  
<211> 17  
<212> PRT  
<213> Arabidopsis thaliana

<400> 8  
Gln Asp Leu Gln Val Ile Asp Lys Ser Ala Asp Gly Ser Thr Ser Val  
1 5 10 15

Arg

<210> 9  
<211> 17  
<212> PRT  
<213> Arabidopsis thaliana

<400> 9  
Gln Glu Leu Gln Val Val Asp Lys Asn Ala Asp Gly Ser Val Thr Val  
1 5 10 15

Gln

<210> 10  
<211> 8  
<212> PRT

<213> Arabidopsis thaliana

<400> 10

Arg Tyr Val Pro Leu Thr Ser Arg  
1 5

<210> 11

<211> 12

<212> PRT

<213> Arabidopsis thaliana

<400> 11

Arg Tyr Val Pro Leu Thr Ser Arg Glu Ala Gln Leu  
1 5 10

<210> 12

<211> 15

<212> PRT

<213> Arabidopsis thaliana

<400> 12

Arg Tyr Val Pro Leu Thr Ser Arg Glu Ala Gln Leu Arg Gly Asp  
1 5 10 15

<210> 13

<211> 23

<212> DNA

<213> Arabidopsis thaliana

<400> 13

gctatggagg ctgtggatag agg

23

<210> 14

<211> 21

<212> DNA

<213> Arabidopsis thaliana

<400> 14

tcagtcccct ctcagctgcg c

21

<210> 15

<211> 21

<212> DNA

<213> Arabidopsis thaliana

<400> 15

ggaccgggta cttaactgct t

21

<210> 16

<211> 24

<212> DNA

<213> Arabidopsis thaliana

<400> 16

ttggcggcac ccttagctgg atca

24

<210> 17  
<211> 25  
<212> DNA  
<213> *Arabidopsis thaliana*

<400> 17  
atgcccagg acatcgtgat ttcac